

Title (en)
Step-down type DC-DC regulator

Title (de)
Gleichstrom-Gleichstrom Abwärtsspannungsregler

Title (fr)
Régulateur abaisseur de tension courant continu - courant continu

Publication
EP 0818875 A2 19980114 (EN)

Application
EP 97304758 A 19970701

Priority
JP 17770096 A 19960708

Abstract (en)
The DC-DC regulator employs a switching circuit to execute a switched capacitor action. The switching circuit connects a first capacitor to a battery to charge the former at an input power voltage, and after charging, disconnect the first capacitor from the battery but simultaneously connect the first capacitor to a second capacitor to transfer accumulated electric charges to the latter. A control circuit including a comparator and a voltage controlled oscillator monitors an output voltage from the second capacitor and performs a switching control so that the output voltage is maintained at a specific level. <IMAGE>

IPC 1-7
H02M 3/07

IPC 8 full level
H02J 1/00 (2006.01); **H02M 3/07** (2006.01)

CPC (source: EP US)
H02M 3/07 (2013.01 - EP US)

Cited by
EP1216495A4; EP1035637A3; EP1126584A3; US7791405B2; US6407938B2; US6643151B1; WO2006020227A3; WO0171893A3; WO0019366A1; WO0219508A3; WO0013300A1; US7161409B2; US7372318B2; WO03100951A1; WO0031864A1

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
EP 0818875 A2 19980114; EP 0818875 A3 19990203; EP 0818875 B1 20060329; CN 1059056 C 20001129; CN 1182973 A 19980527; DE 69735572 D1 20060518; DE 69735572 T2 20061228; JP 3224744 B2 20011105; JP H1028371 A 19980127; US 5717318 A 19980210

DOCDB simple family (application)
EP 97304758 A 19970701; CN 97114586 A 19970707; DE 69735572 T 19970701; JP 17770096 A 19960708; US 78300397 A 19970114